

Memorandum

Date: November 9, 2001
Telephone: 916-654-4206

To: William J. Keese, Chairman
Arthur H. Rosenfeld, Commissioner
Robert Pernell, Commissioner
Michal C. Moore, Commissioner
Robert A. Laurie, Commissioner

From: **California Energy Commission** - Steve Larson
1516 Ninth Street
Sacramento, CA 95814-5512
Executive Director

Subject : **COSUMNES POWER PLANT - DATA ADEQUACY RECOMMENDATION (01-AFC-19)**

At the October 17, 2001 Energy Commission Business Meeting, the Cosumnes Power Plant Project Application for Certification (AFC) (01-AFC-19) was deemed data inadequate. In effort to make the AFC complete, the applicant submitted supplemental project information on November 8, 2001.

Staff has reviewed the AFC and the supplemental information provided by the applicant and staff has determined that the AFC is data adequate for the 12-month requirements (Cal. Code of Regulations, Title 20, § 1704, Appendix B). Attached are the revised data adequacy worksheets for all technical disciplines that were previously found to be data inadequate. The deficiencies in all outstanding areas have been eliminated.

At the Energy Commission's business meeting on November 14, 2001, I will be recommending that the Energy Commission accept the AFC.

If you have any questions, please call Kristy Chew, Energy Commission's Project Manager, at (916) 654-3929.

STEVE LARSON
Executive Director

Attachments

cc: Colin Taylor, SMUD
Kevin Hudson, Integrated Engineers & Contractors Corporation
John Carrier, CH2M HILL

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Air Quality

Project: Cosumnes Power Plant

Technical Staff: Tuan Ngo, P.E.

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Keith Golden

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 8.1.1, pp. 8.1-1 to 8.1-10. Section 8.1.5, pp. 8.1-27 to 8.1-47; Appendices 8.1A, 8.1D. Section 8.1.5, pp. 8.1-50 to 8.1-52; Appendix 8.1F	Yes	
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Section 8.1.4.3, pp. 8.1-15 to 8.1-53	Yes	Staff received a notice from the Sacramento Metropolitan Air Quality Management District (District) that the project is deemed "complete" as of October 26, 2001.
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Table 8.1-17, pp. 8.1-28. Appendix 8.1D, Tables 8.1D-1 to 8.1D-3 Section 8.1.5.1, Tables 8.1-21 and 8.1-22	Yes	
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 8.1.5.2.5, pp. 8.1-50 to 8.1-51	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Appendix 8.1B, pp. 8.1B-4 Table 8.1B-5	Yes	
Appendix B (g) (8) (E)	The emission rates of criteria pollutants from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all secondary emission sources.	Section 8.1.5, pp. 8.1-27 to 8.1-31, Table 8.1-23.	Yes	
Appendix B (g) (8) (F)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Section 8.1.5-2, pp. 8.1-29	Yes	

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Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Section 8.1.5.2, pp. 8.1-39 Figures 8.1-10 to 8.1-20	Yes	
Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Figures 8.1-5A to 8.1-9E	Yes	
Appendix B (g) (8) (H) (i)	If the data is collected from the project site, the applicant shall demonstrate compliance with the requirements of the U.S. Environmental Protection Agency document entitled "On-Site Meteorological Program Guidance for Regulatory Modeling Applications" (EPA - 450/4-87-013 (August 1995), which is incorporated by reference in its entirety.)	N/A		
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Figures 8.1-5A to 8.1-9E	Yes	
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:			

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Technical Staff: Tuan Ngo, P.E.
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Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM ₁₀) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM ₁₀)] from construction-related equipment;	Appendix 8.1A	Yes	
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert criteria pollutant (NO _x , SO ₂ , CO and PM ₁₀) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions; and	Appendix 8.1D	Yes	
Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a six mile radius which have received construction permits but are not yet operational, or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard.	Appendix 8.1G	Yes	

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Docket: 01-AFC-19

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Technical Senior: Keith Golden

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Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:			
Appendix B (g) (8) (J) (i)	The quantity of offsets needed;	September 13, 2001 submittal - Confidential. Supplemental filing 10/01.	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions; and	September 13, 2001 submittal - Confidential.	Yes	
Appendix B (g) (8) (J) (iii)	Method of emission reduction.	September 13, 2001 submittal - Confidential.	Yes	
Appendix B (g) (8) (K)	A topographic map containing contour and elevation data, at a scale of 1:24,000, showing the area within 6 miles of the power plant site.		Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 8.1-16, pp. 8.1-22 to 8.1-26	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 8.1-15, pp. 8.1-21	Yes	

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Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 8.1.5.2.5, pp. 8.1-47 to 8.1-53	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 8.1-15, pp. 8.1-21	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 8.1-16, pp. 8.1-22 to 8.1-26	Yes	

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DATA ADEQUACY WORKSHEET

Revision No. 1 Date: November 9, 2001

Technical Area: **Biological Resources**

Project: Cosumnes Power Plant

Technical Staff: Rick York & Melinda Dorin

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Dr. Jim Brownell

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Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Existing site conditions: Section 1.5.4, p. 1-5; and Section 8.2.3, pp. 8.2-3 to -9 Impacts: Section 8.2.4, pp. 8.2-9 to -16; and Table 8.2-4, pp. 8.2-35 to -37 Mitigation & Monitoring: Section 8.2.5, pp. 8.2-16 to -18.	Yes Yes Yes	
Appendix B (g) (13) (A)	A regional overview and discussion of biological resources, with particular attention to sensitive biological resources near the project and a map at a scale of 1:100,000 (or some other suitable scale) showing their location in relation to the project.	Regional bio overview: Section 8.2.3.1, p. 8.2-3; Section 8.2.3.2, p. 8.2-3 to -6; Section 8.4.2.1, p. 8.4-4; and Section 8.4.2.5.1, p. 8.4-8 1:100,000 scale map & sensitive species: Figure 8.2-1	Yes Yes	

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Technical Area: Biological Resources

Project: Cosumnes Power Plant

Technical Staff: Rick York & Melinda Dorin

Project Manager: Kristy Chew

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Appendix B (g) (13) (B)	A discussion and detailed maps at a scale of 1:6,000, of the biological resources at the site of the proposed project and related facilities, and in areas adjacent to them, out to a mile from the site and 1,000 feet from the outer edge of linear facility corridors. Include a list of the species actually observed and those with a potential to occur. The discussion and maps shall address the distribution of community types, den or nesting sites, population concentrations, migration corridors, breeding habitats, and the presence of sensitive biological resources.	<p>Discussion of biological resources: Section 8.2.3.3, pp. 8.2-6 to -9</p> <p>Maps of project region out to one mile: Figures 8.2-2a; 2b; and, 2c</p> <p>List of species potentially occurring: Table 8.2-3, pp. 8.2-30 to -34</p> <p>List of species actually observed: <u>October 2001 supplemental filing</u></p>	<p>Yes</p> <p>No <u>Yes</u></p> <p>Yes</p> <p>No <u>Yes</u></p>	<p>Please provide a map at the correct 1:6,000 scale that shows the biological resources at the site out to one mile</p> <p>Please include a list of all the species actually observed at the site.</p>
Appendix B (g) (13) (C)	A description of all studies and surveys used to provide biological information about the project site, including seasonal surveys and copies of the California Department of Fish and Game's Natural Diversity Data Base Survey Forms, "California Native Species Field Survey Forms", and "California Natural Community Field Survey Forms", completed by the applicant. Include the dates and duration of the studies, methods used to complete the studies, and the names and qualifications of individuals conducting the studies.	<p>Studies: Section 8.2.3.2, p. 8.2-9; and, Appendix 8.2A</p> <p>Names and qualifications of those who completed biological resource studies: Appendix 8.2C</p>	<p>Yes</p> <p>Yes</p>	

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Appendix B (g) (13) (D)	A discussion of all permanent and temporary impacts to biological resources from site preparation, construction activities, and plant operation. Discussion of impacts must consider impacts from cooling tower drift, and from the use and discharge of water during construction and operation. For facilities which use once-through cooling or take or discharge water directly from or to natural sources, discuss impacts resulting from entrainment, impingement, thermal discharge, effluent chemicals, type of pump (if applicable), temperature, volume and rate of flow at intake and discharge location, and plume configuration in receiving water.	Impacts: Section 1.5.4, p. 1-5; and Section 8.2.4, pp. 8.2-9 to -16; Table 8.2-4, pp. 8.2-35 to -37 Cooling tower drift: Section 8.2.4.2, pp. 8.2-12 to -13 Use and discharge of water: Section 1.5.2, p. 1-4; Section 8.2.4.2, p 8.2-11; and Section 7.1, pp.7-1 to -6 Once-through cooling: Not Applicable	Yes Yes Yes <u>N/A</u>	
Appendix B (g) (13) (E)	A discussion of the following:	--	--	--
Appendix B (g) (13) (E) (i)	All measures proposed to avoid and/or reduce any adverse impacts;	Avoidance measures: Section 8.2.5, pp. 8.2-16 to -18; and Appendix 8.2D	Yes	
Appendix B (g) (13) (E) (ii)	All measures proposed to mitigate any adverse impacts, including any proposals for off-site mitigation; and	Mitigation measures: Section 8.2.5, pp. 8.2-16 to -18; and Appendix 8.2D	Yes	
Appendix B (g) (13) (E) (iii)	Any educational programs proposed to enhance employee awareness in order to protect biological resources.	Educational programs: Section 8.2.5.1, p. 8.2-16	Yes	
Appendix B (g) (13) (F)	A discussion of compliance and monitoring programs proposed to ensure the effectiveness of mitigation measures incorporated into the project.	Compliance monitoring: Section 8.2.5, pp. 8.2-16 to -18; and, Appendix 8.2D	Yes	
Appendix B (g) (13) (G)	A discussion of native fish and wildlife species of commercial and/or recreational value that could be impacted by the project.	Commercial & recreational species:	No <u>Yes</u>	Please provide a discussion of native fish and wildlife species that are of commercial and/or recreational value that could be impacted by the project.

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Appendix B (g) (13) (H)	For purposes of this section, sensitive biological resources are one of the following:	--	--	--
Appendix B (g) (13) (H) (i)	Species listed under state or federal Endangered Species Acts;	Listed species: Table 8.2-3, pp. 8.2-30 to -34	Yes	
Appendix B (g) (13) (H) (ii)	Resources defined in sections 1702 (q) and (v) of Title 20 of the California Code of Regulations; and	Listed species: Table 8.2-3, pp. 8.2-30 to -34; Section 8.4.2.5.1, p. 8.4-8	Yes	
Appendix B (g) (13) (H) (iii)	Species or habitats identified by legislative acts as requiring protection.	Listed species: Section 8.4.2.5.1, p. 8.4-8; and Table 8.2-3, pp. 8.2-30 to -34	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	LORS table: Table 8.2-1; pp. 8.2-20 to -23	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Agency jurisdiction/permit table: Table 8.2-1, pp. 8.20 to -23	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Discussion of conformity with LORS: Table 8.2-1, pp. 8.20 to -23	Yes	

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Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Agency contacts: Table 8.2-5, p. 8.2-38	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Permit schedule: Table 8.2-6, p. 8.2-38, <u>and October 2001 supplemental filing</u>	No <u>Yes</u>	Please provide additional information on a proposed schedule indicating when federal (USFWS and USACE) permits will be obtained

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Project: **Cosumnes Power Plant**

Technical Staff: **Dorothy Torres**

Project Manager: **Kristy Chew**

Docket: **01-AFC-19**

Technical Senior: **Dale Edwards**

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Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	AFC Vol I, p. 8.4-5 to7 AFC Vol I, p. 8.3-25, 26 AFC Vol I, p. 8.3-25, 26 <u>Information not available until survey for data request is complete</u>	No <u>Yes</u>	Please provide a discussion of the expected direct, indirect and cumulative, impacts due to the operation and maintenance of the project.
Appendix B (g) (2) (A)	A brief summary of the ethnology, prehistory, and history of the region in which the project site and related facilities are located and maps at a scale of 1:24,000, indicating areas of ethnographic occupation. The region may vary depending on the extent of the territory occupied or used by prehistoric cultures indigenous to the area in which the project is located.	AFC Vol I, p. 8.3-12,13 AFC Vol I, Fig. 8.3-1	Yes	
Appendix B (g) (2) (B)	A description of all literature searches and field surveys used to provide information about known cultural resources in the project vicinity. If survey records of the area potentially physically affected by the project are not available, and the area has the potential for containing significant cultural resources, the applicant shall submit a new or revised survey for any portion of the area lacking comprehensive survey data. A discussion of the dates of the surveys, methods used in completing the surveys, and the identification and qualification of the individuals conducting the surveys shall be included.	AFC Vol I, p. 8.3-16 Con App. 8.3C-1, P. 13 AFC Vol I, p. 8.3-21 <u>Confidential Supplement submitted 11/5/01</u>	No <u>Yes</u>	Please provide a discussion of methods used in completing the surveys that were not conducted by CH2MHill. Provide Identification and qualifications of the individuals conducting all surveys on the preferred gas line referenced in the AFC.

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Project Manager: Kristy Chew

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Technical Senior: Dale Edwards

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Appendix B (g) (2) (C)	A discussion of the sensitivity of the project area described in subsection (g)(2)(A) and the presence and significance of any known archeological sites and other cultural resources that may be affected by the project. Information on the specific location of archeological resources shall be included in a separate appendix to the application and submitted to the Commission under a request for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq.	Con App 83C-2 AFC Vol I, 8.3-17, to 22 Con App 8.3C-1, 8.3E, 8.3C2, 8.3-3, 8.3D	Yes	
Appendix B (g) (2) (D)	A summary of contacts and communications with, and responses from, Native American representatives who may have an interest in heritage lands and/or resources potentially affected by the proposed project.	Con App 8.3C-1	Yes	
Appendix B (g) (2) (E)	In the discussion on mitigation and monitoring prepared pursuant to subsection (g)(1), a discussion of any educational programs proposed to enhance awareness of potential impacts to archeological resources by employees and contractors, measures proposed for mitigation of impacts to known cultural resources, and a set of contingency measures for mitigation of potential impacts to previously unknown cultural resources.	AFC Vol I, p. 8.3-27 AFC Vol I, p. 8.3-25,29 <u>Information not available until survey required under data request is complete</u>	No Yes	Please update the discussion of monitoring and mitigation after completion of the identification of cultural resources that might be affected by the preferred natural gas line.
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	AFC Vol I, p. 8.3-3 <u>Additional Info Submitted 10/25/01</u>	Yes No	Please provide a discussion of permits applicable to the project.

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Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	AFC Vol I, p. 8.3-29 <u>Additional Info Submitted 10/25/01</u>	Yes No	Please identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws.
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	AFC Vol I, p. 8.3-1,2	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	<u>Additional Info Submitted 10/25/01</u>	Yes No	Please provide a non-hypothetical schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	<u>Additional Info Submitted 10/25/01</u>	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: 10/22/01

Technical Area: Noise

Project: Cosumnes Power Plant

Technical Staff: Jim Buntin

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Lynn Alexander

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Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	AFC Section 8.5	Yes	
Appendix B (g) (4) (A)	A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area impacted by the proposed project is that area where there is a potential increase of 5 dB(A) or more, during either construction or operation, over existing background levels.	AFC Figure 8.5-2	Yes	
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for duration at the applicant's discretion during the same 25-hour period. The results of the noise level measurements shall be reported in L_{eq} (equivalent sound or noise level), L_{dn} (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L_{10} , L_{50} , and L_{90} values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported.	AFC Section 8.5.3, Appendix 8.5A.	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: 10/22/01

Technical Area: Noise
Project Manager: Kristy Chew

Project: Cosumnes Power Plant
Docket: 01-AFC-19

Technical Staff: Jim Buntin
Technical Senior: Lynn Alexander

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.	AFC 8.5.4, Supplement dated October 2001	Yes	
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.	AFC Table 8.5-9	Yes	
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.	AFC Sections 8.5.4.2.1 and 8.5.4.3.1	Yes	
Appendix B (g) (4) (F)	The audible noise from existing switchyards and overhead transmission lines that would be affected by the project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.	AFC Section 8.5.4.3.2	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	AFC Table 8.5-5	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: 10/22/01

Technical Area: Noise
Project Manager: Kristy Chew

Project: Cosumnes Power Plant
Docket: 01-AFC-19

Technical Staff: Jim Buntin
Technical Senior: Lynn Alexander

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	AFC Section 8.5.2	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	AFC Page 8.5-14	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	AFC Table 8.5.6	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	AFC Section 8.5.7	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: **Soil Resources**

Project: Cosumnes Power Plant

Technical Staff: Richard Latteri

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Dick Anderson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 8.9.5, p 8.9-11 & 8.9 -12 <u>CPP Data Adequacy Response –Oct. 2001</u>	No <u>Yes</u>	Please provide information on proposed monitoring efforts during project construction to ensure success of mitigation measures. Please discuss any direct, indirect or cumulative impacts to soil quality associated with trenching and backfilling of the natural gas pipeline and rerouting of the streambeds located on the project site.
Appendix B (g) (15) (A)	A map at a scale of 1:24,000 and written description of soil types and all agricultural land uses that will be affected by the proposed project. The description shall include:	Figures 8.9-1a to 8.9-1e Figure 8.9-2 <u>CPP Data Adequacy Response –Oct. 2001</u>	No <u>Yes</u>	Please provide agricultural maps along the proposed gas pipeline route with a legend containing farmland mapping classifications.
Appendix B (g) (15) (A) (i)	The depth, texture, permeability, drainage, erosion hazard rating, and land capability class of the soil; and	Table 8.9-2a & -2B	Yes	
Appendix B (g) (15) (A) (ii)	An identification of other physical and chemical characteristics of the soil necessary to allow an evaluation of soil erodibility, permeability, re-vegetation potential, and cycling of pollutants in the soil-vegetation system.	Table 8.9-2a & -2B	Yes	
Appendix B (g) (15) (C)	An assessment of the effects of the proposed project on soil resources and agricultural land uses. This discussion shall include:	Sections 8.9.2.1 & 8.9.2.2, p 8.9-3 <u>CPP Data Adequacy Response –Oct. 2001</u>	No <u>Yes</u>	Please provide an assessment of the effects of the proposed natural gas pipeline construction activities (trenching, installation, backfilling, etc.) on soil uses and agricultural lands.
Appendix B (g) (15) (C) (i)	The quantification of accelerated soil loss due to wind and water erosion;	<u>CPP Data Adequacy Response –Oct. 2001</u>	No <u>Yes</u>	Please provide an assessment of the accelerated soil loss to wind and water during site and linear construction.
Appendix B (g) (15) (C) (iii)	The effect of power plant emissions on surrounding soil-vegetation systems.	Section 8.2-12, p 8.2-12 & 8.2-13 Section 8.9.4, p 8.9-11	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Soil Resources

Project: Cosumnes Power Plant

Technical Staff: Richard Latteri

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Dick Anderson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 8.9-1, p 8.9-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 8.9-3, p 8.9-13	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Sect 8.4.5, p 8.4-10 & -11 Sect 8.9.1, p 8.9-1 & -2 Table 8.9-1	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Sect 8.9.7, p 8.9-12 & -13	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 8.9.7, p. 8.9-12 Table 8.14-9, p 8.14-28	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Traffic and Transportation

Project: Cosumnes Power Plant

Technical Staff: James Fore

Project Manager: Sandra Formm

Docket: 01-AFC-19

Technical Senior: Eileen Allen

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	AFC Section 8.10.3.2, Pages 8.10-8 and 8.10-9, AFC Section 8.10.4.2, Page 8.10-10, Section 8.10.4.3 Pages 8.10-13 and 8.10-14, Section 8.10.6, Pages 8.10-14 and 8.10-15.	Yes	
Appendix B (g) (5) (A)	A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. Include a reference to the transportation element of any applicable local or regional plan.	AFC Section 8.10.3.1, Pages 8.10-6 through 8.10-8, Figure 8.10-1.	Yes	
Appendix B (g) (5) (B)	An identification, on topographic maps at a scale of 1:24,000 and a description of existing and planned roads, rail lines, including light rail, bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:	AFC Figure 8.10-2	Yes	
Appendix B (g) (5) (B) (i)	Road classification and design capacity;	AFC Section 8.10.3.1, Page 8.10-7	No Yes	No design capacity given for area roadways.
Appendix B (g) (5) (B) (ii)	Current daily average and peak traffic counts;	AFC Section 8.10.3.12, Table 8.10-3, Page 8.10-7.	Yes	
Appendix B (g) (5) (B) (iii)	Current and projected levels of service before project development, during construction, and during project operation;	AFC Section 8.10.3.1, Table 8.10-3, Page 8.10-7. AFC Section 8.10.4.2, Table 8.10-6 Page 8.10-11.	Yes	
Appendix B (g) (5) (B) (iv)	Weight and load limitations;	AFC Section 8.10.2.4, Page 8.10-6	Yes	
Appendix B (g) (5) (B) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	AFC Section 8.10.3.1, Table 8.10-3, Page 8.10-7.	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Traffic and Transportation

Project: Cosumnes Power Plant

Technical Staff: James Fore

Project Manager: Sandra Formm

Docket: 01-AFC-19

Technical Senior: Eileen Allen

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (B) (vi)	An identification of any road features affecting public safety.	AFC Section 8.10.4.2, Pages 8.10-10 through 8.10-13.	No Yes	Twin City Road will handle the majority of traffic associated with the project. Please indicate if any features affecting public safety exist along this route such as railroad crossings and intersections without signals, sharp turns, narrow bridges, etc.
Appendix B (g) (5) (C)	A description of any new, planned, or programmed transportation facilities in the project vicinity, including those necessary for construction and operation of the proposed project. Specify the location of such facilities on topographic maps at a scale of 1:24,000.	AFC Section 8.10.3.2 Pages 8.10-8 and 8.10-9.	Yes	
Appendix B (g) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified. Include anticipated project-specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in subsection (g)(5)(C).	AFC Sections 8.10.4.2 and 8.10.4.3, Page 8.10-10 through Page 8.10-14.	Yes	
Appendix B (g) (5) (E)	A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.	AFC Section 8.10.4.3 Page 8.10-13 and AFC Section 8.12.8.2.1, Page 8.12-20.	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	AFC Section 8.10.2.4, Table 8.10-2, Pages 8.10-4 and 8.10-5.	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Traffic and Transportation

Project: Cosumnes Power Plant

Technical Staff: James Fore

Project Manager: Sandra Formm

Docket: 01-AFC-19

Technical Senior: Eileen Allen

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	AFC Table 8.10-2, Pages 8.10-4 and 8.10-5, Table 8.10-8, Page 8.10-15.	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	AFC Sections 8.10.4.2 and 8.10.4.3, Page 8.10-10 through Page 8.10-14.	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	AFC Section 8.10.7, Table 8.10-7, Page 8.10-15	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	AFC Section 4.10.8, Table 8.10-8, Page 8.10-15	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Transmission System Eng.

Project: Cosumnes Power Plant

Technical Staff: Laiping Ng

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Al McCuen

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators. This description shall include power load flow diagrams which demonstrate conformance or nonconformance with utility reliability and planning criteria at the time the facility is expected to be placed in operation and five years thereafter; and	<p>Section 5.1 – 5.5, P 5-1 to 5-9</p> <p>Appendix 5.0</p> <p><u>Transmission System Impact Study (TSIS), Revised October 16, 2001, Data Adequacy Response, Section 2.7</u></p> <p><u>TSIS, page 5</u></p> <p><u>TSIS, page 2</u></p> <p><u>TSIS, Appendix D1 – E4</u></p>	<p>No</p> <p><u>Yes</u></p> <p><u>Yes</u></p> <p><u>Yes</u></p> <p><u>Yes</u></p>	<p>Please provide a System Impact Study Report for the project. Analyze the system impact with and without the project during peak and off-peak system conditions, which will demonstrate conformance or non-conformance with the utility reliability and planning criteria with the following provisions:</p> <p>a. Identify major assumptions in the base cases including imports to the system, major generation and load changes in the system and queue generation.</p> <p>b. Short circuit studies including all breakers to be replaced (Optional).</p> <p>c. Analyze system for Transient Stability and Post-transient voltage conditions under critical N-1 and N-2 contingencies, and provide related plots, switching data and a list for voltage violations in the studies (Optional).</p> <p>d. Identify the reliability and planning criteria utilized to determine the criteria violation.</p> <p>e. List mitigation measures considered (required) and those selected (optional).</p> <p>f. Provide electronic copies of *.drw PSLF files (optional).</p> <p>Provide power flow diagrams (MW, % loading & P-U voltage) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations appear.</p>
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Sections 5.3, P 5-6 to 5-8	Yes	
Appendix B (g) (18) (A)	The locations and a description of the existing switchyards and overhead and underground transmission lines that would be affected by the proposed project.	Section 5.3.2.2 to 5.3.2.3 P 5-8	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Visual Resources

Project: Cosumnes Power Plant

Technical Staff: Gary Walker

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Dale Edwards

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Pp.8.11-1 through 8.11-14, Section 8.11. <u>October 2001 Data Adequacy Supplement, pp.13-15.</u>	No <u>Yes</u>	Submittal of the information requested below will satisfy this requirement.
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the project, the region that can be seen from the vicinity of the project, and the proposed project site. Include:	Pp. 8.11.-1 through 8.11-7, Section 8.11.3. <u>October 2001 Data Adequacy Supplement, pp.13-15.</u>	No <u>Yes</u>	Submittal of the information requested below will satisfy this requirement.
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 of the areas from which the project may be seen, identification of the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(E);	Figure 8.11-1. <u>October 2001 Data Adequacy Supplement, Revised Figure 8.11.1.</u>	No <u>Yes</u>	The map (Figure 8.11-1) is not at a scale of 1:24,000, as required. Please provide Figure 8.11-1 at a scale of 1:24,000.
Appendix B (g) (6) (A) (ii)	Elevations of any existing structures on the site; and	Not applicable.	Not applicable	
Appendix B (g) (6) (A) (iii)	The visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities.	Pp.8.11-1 through 8.11-4, Section 8.11.3.	Yes	
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that will be impacted by the proposed project.	Pp.8.11-4 through 8.11-7, Sections 8.11.3.4 through 8.11.3.6.	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: **Visual Resources**

Project: **Cosumnes Power Plant**

Technical Staff: **Gary Walker**

Project Manager: **Kristy Chew**

Docket: **01-AFC-19**

Technical Senior: **Dale Edwards**

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (C)	After discussions with staff and community residents who live in close proximity to the proposed project, identify the scenic corridors and any visually sensitive areas potentially affected by the proposed project, including recreational and residential areas. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. For purposes of this section, a scenic corridor is that area of land with scenic natural beauty, adjacent to and visible from a linear feature, such as a road, or river.	Pp.8.11-5 through 8.11-7, Section 8.11.3.5. <u>October 2001 Data Adequacy Supplement, p.13.</u>	No <u>Yes</u>	The AFC (p.8.11-7) states that KOP 3 is representative of the view from "several" residences. Please specify the number of residences or provide a numeric estimate of the number of residences.
Appendix B (g) (6) (D)	A description of the dimensions, color, and material of each major visible component of the project.	P.8.11-9. Section 8.11.4.3. Section 2, Figure 2.2-2. <u>October 2001 Data Adequacy Supplement, pp.13-14.</u>	No <u>Yes</u>	The AFC specifies the height of the HRSG stacks (p.8.11-9 and Figure 2.2-2) and the transmission poles (p.5-8 and Figures 5.3-4a and 5.3-4b). However, the AFC does not specify the diameter of the HRSG stacks or the transmission poles, or the dimensions of the other major visible components of the project. Please provide these dimensions.
Appendix B (g) (6) (E)	Full-page color photographic reproductions of the existing site, and full-page color simulations of the proposed project in the existing setting from each location representative of the view areas most sensitive to the potential visual impacts of the project.	Figures 8.11-2 through 8.11-5.	Yes	
Appendix B (g) (6) (F)	An assessment of the visual impacts of the project, including light and glare, and visible plumes.	Pp.8.11-8 through 8.11-14, Sections 8.11.4 and 8.11.5.	Yes	

Adequacy: Adequate: **X** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: **Visual Resources**
Project Manager: **Kristy Chew**

Project: **Cosumnes Power Plant**
Docket: **01-AFC-19**

Technical Staff: **Gary Walker**
Technical Senior: **Dale Edwards**

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 8.11-2.	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 8.11-3.	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 8.11-3.	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 8.11-3.	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Not provided. <u>October 2001 Data Adequacy Supplement, pp.14-15.</u>	No <u>Yes</u>	The AFC (Table 8.11-2) states that "the 160-foot stack height would require approval by the County" because it exceeds the 140-foot height limit. Please provide the schedule for obtaining County approval. Please also specify the steps the applicant has taken or plans to take to obtain such approval.

Adequacy: Adequate: **x** Inadequate: _____

DATA ADEQUACY WORKSHEET

Revision No.: 1 Date: November 9, 2001

Technical Area: Water Resources

Project: Cosumnes Power Plant

Technical Staff: Richard Latteri

Project Manager: Kristy Chew

Docket: 01-AFC-19

Technical Senior: Dick Anderson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Sect 2.2.7 to Sect 2.2.9, p. 2-8 to 2-12 Figure 2.1-1 & -2 Sect 8.14, p 8.14-1 to -27 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 16 & 17 USGS 7½ Quads – Oct 2001 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 16 to 18</u>	No <u>Yes</u>	Please provide a discussion of the indirect impacts of project wastewater disposal and any mitigation measures or monitoring activities to be undertaken to ensure no adverse environmental impacts. The indirect impacts of project wastewater disposal were not addressed in the Oct 2001 response. In addition to above request, provide more information on the potential impacts of cooling tower sludge disposal to either a Class I or Class II landfill. Please provide information on any monitoring activities needed to ensure that the project will not have adverse impacts on surface and groundwater resources and potential resolution options in the event impacts are discovered—including Rancho Seco Lake as it applies to a backup water source. Figure 8.14-5 and the Goose Creek Quadrangle show other surface water bodies in the vicinity of the CPP site. Please include these surface water bodies when describing proposed surface water monitoring activities.
Appendix B (g) (14) (A)	All information required by the Regional Water Quality Control Board in the region where the project will be located to apply for:		N/A	
Appendix B (g) (14) (A) (i)	Waste Discharge Requirements; and	Sect 8.14.4, p 8.14-7 to -11 Fig 8.14-3a,b,c & d Tables 8.14-3 & -4 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 17 <u>Revised CPP Data Adequacy</u>	No <u>Yes</u>	Please provide all information required by the regional board for a report of waste discharge, including appropriate maps at a 1:24,000 scale, or explain why this information is not needed. The AFC must contain all information required by the Central Valley Regional Water Quality Control Board for a report of waste discharge. Please provide the additional information:

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01-AFC-19

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 Technical Senior: Dick Anderson

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
		<u>Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 19 to 21</u> <u>Figure 8.14-6</u> <u>Figure 8.14-4R</u>		1) — Average and maximum daily water balance diagrams at 10 cycles of concentration. 2) — A USGS 7½" Quadrangle map (or its equivalent) extending to at least one mile beyond site boundaries. The map must show the outline of the CPP, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage or disposal facilities. Include all springs, rivers, creeks and other surface water bodies, all domestic and irrigation wells, the direction of prevailing winds, and all residences in the map area. 3) — A site map at an appropriate scale (1"= 50 to 100') showing the location and dimension of all major buildings, roads, parking areas, process and wastewater treatment structures, on-site wells, ponds, and wastewater application areas. — A grading and drainage plan at an appropriate scale (1"= 50 to 100') showing slope and direction of surface drainage at the CCP site.
Appendix B (g) (14) (A) (ii)	a National Pollutant Discharge Elimination System Permit.	Sect 8.14.4, p 8.14-7 to-13 Sect 8.14-5, p 8.14-13 to -15 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 17 & 18 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 21</u>	No <u>Yes</u>	Please provide all information required by the regional board to apply for an NPDES permit as specified in Section VI of Application Form 1 from Appendix 8.14A. Please describe the BMP's to be employed to eliminate or reduce contamination of storm water from plant construction, concrete washing areas, parking areas, vehicle fueling and maintenance areas, equipment storage area, materials storage areas, waste handling/disposal/containment areas, and service areas.

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Appendix B (g) (14) (B)	A description of the hydrologic setting of the project. The information shall describe, in writing and on maps at a scale of 1:24,000, the chemical and physical characteristics of the following water bodies that may be affected by the proposed project:		N/A	
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	Sect 8.14.3.2, p 8.14-6 & -7 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 18	<u>No</u> <u>Yes</u>	Please provide a hydrostratigraphic map at a scale of 1:24,000.
Appendix B (g) (14) (B) (ii)	Surface water bodies; and	Sect 8.14.3.1, p 8.14-5 & -6 Figure 8.14-1 Tables 8.14-8, p 8.14-19 to 8.14-24 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 8 USGS 7½ Quads – Oct 2001 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 22 & 23</u>	<u>No</u> <u>Yes</u>	Please provide required chemical and physical characteristics for the surface water bodies that will receive stormwater and/or wastewater runoff from the site. Include maps at a scale of 1:24,000. Please provide a chemical analysis of Clay Creek. The proposed gas pipeline will cross a number of surface water bodies. Please provide required chemical and physical characteristics for the surface water bodies crossed by the proposed pipeline and other linear facilities. Please provide a chemical analysis of the Cosumnes River, Badger Creek and the vernal pools north of the site that are crossed by the water supply line.
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones.	Sect 8.14.3, p 8.14-7 Figure 8.14-2 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 19 Figures 8.14-6a to -6e	<u>No</u> <u>Yes</u>	Please provide maps of water inundation zones at a scale of 1:24,000 that show both the project site and the route of the proposed gas pipeline.

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Appendix B (g) (14) (C)	A description of the water to be used and discharged by the project. This information shall include:		N/A	
Appendix B (g) (14) (C) (i)	Source of the water and the rationale for its selection, and if fresh water is to be used for power plant cooling purposes, a discussion of all other potential sources and an explanation why these sources were not feasible;	Sect 7.0, p 7-1 to 7-8	Yes	
Appendix B (g) (14) (C) (ii)	The physical and chemical characteristics of the source and discharge water;	Tables 7.1-2,-3, & -4 Sect. 8.14.4, p 8.14-7 to 8.14-13 Tables 8.14-3 to 8.14-7 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 19 & 20 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 23</u>	No Yes	Please provide the chemical characteristics of water in Rancho Seco Lake. Please provide a chemical analysis of Rancho Seco Lake
Appendix B (g) (14) (C) (iii)	Average and maximum daily and annual water demand and waste water discharge for both the construction and operation phases of the project; and	Table 2.2-1, p 2-8 Sect. 7.1.7, p 7-6 Sect 8.14.4, p. 8.14-7 to 8.14-13 Figures 8.14-3a to -3d CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p20	No Yes	Please provide information on the maximum daily water use for construction including a breakdown in gpd for all construction related activities.

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Appendix B (g) (14) (C) (iv)	A description of all facilities to be used in water conveyance, treatment, and discharge. Include a water mass balance diagram.	Sect 2.2.7, p 2-8 to 2-12 Figures 2.2-1, 2.2-6a & -6b Sect 8.13.4, p 8.13-8 to 8.13-10 Figures 8.14-3a to -3d CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 20 & 21 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 24 & 25</u> <u>Figure 7.1-1R</u> <u>Figures 8.14-3aR to -3dR</u> <u>Figures 8.14-6a to -6d</u>	No <u>Yes</u>	Please provide a complete description of all facilities, including diagrams and maps at an appropriate scale, for the conveyance facilities from the Folsom South Canal, the diversion to the CPP site, and Rancho Seco Lake. Please show existing 1971 facilities (RSP pump station, 66" pipeline from the Folsom South Canal to RSP and the 48" pipeline from Rancho Seco Lake) integrated with the proposed water conveyance facilities. Please provide a description of potential wastewater disposal facilities and the method of disposal for the hazardous wastewater and hazardous/ nonhazardous sludge.
Appendix B (g) (14) (D)	A description of pre-, and post-construction runoff and drainage patterns, including:		N/A	
Appendix B (g) (14) (D) (i)	Precipitation and storm runoff patterns; and	Sect 8.14.4.3, p 8.14-12 & 8.14-13 Figure 8.14-4	Yes	
Appendix B (g) (14) (D) (ii)	Drainage facilities and design criteria.	Sect 8.14.4.3, p 8.14-12 & 8.14-13 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 21 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 25 & 26</u>	No <u>Yes</u>	<u>Please describe the stormwater collection system including capacity, construction and operation. Please include design criteria for the various facilities.</u> <u>Please provide pre-and post construction runoff and drainage patterns on a topographic map of appropriate scale showing use of existing contours and all other pre- and post construction drainage features.</u>

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Appendix B (g) (14) (E)	An assessment of the effects of the proposed project on water resources. This discussion shall include:		N/A	
Appendix B (g) (14) (E) (i)	The effects of project demand on the water supply and other users of this source;	Sect 7.5, p 7-7 & 7-8 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 21 & 22 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 26 & 27</u> <u>Attachment WR-16</u>	No <u>Yes</u>	Please provide an assessment of impacts from this project's proposed water use on other users of overdrafted CVP water. Please provide the historic annual consumption of CVP water used for RSP operations and a discussion of how that volume has changed since the permanent closure of the plant. Please provide a will serve letter form USBR detailing SMUD's long-term availability of CVP/USBR water.
Appendix B (g) (14) (E) (ii)	The effects of construction activities and plant operation on water quality; and	Sect 8.14.5, p 8.14-14 to 8.14- 27 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 22 <u>Revised CPP Data Adequacy Response – Nov. 8, 2001</u> <u>Sect 2.9, p. 27</u> <u>Figures 5.3-1 & 7.1-1R</u>	No <u>Yes</u>	Please provide an assessment of the potential indirect and cumulative impacts associated with site and linear construction, including laydown areas, on surface water bodies. Need more info on transmission line and water supply line and their potential impact on the vernal pools located between the CPP site and the RSP.
Appendix B (g) (14) (iii)	The effects of the project on the 100-year flood plain or other water inundation zones.	Sect 8.14.5.3, p 8.14-25 CPP Data Adequacy Response – Oct. 2001 Sect 2.9, p 22 Figure 8.14-6a to -6e	No <u>Yes</u>	More information is required on those areas of the 100-year flood plain where the proposed gas pipeline will cross and its potential effects on stormwater runoff.

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Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Sect 8.14.2, p 8.14-1 to -3 Table 8.14-1	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 8.14-1	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Table 8.14-1	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Table 8.14-1 Table 8.14-9	Yes	
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Sect 8.14.9, p 8.14-27 Table 8.14-9, p 8.14-28	Yes	

